IN THE CLAIMS

Please make the following claim substitutions:

1. (Previously presented) A method of regulating traffic in a communications network comprising the steps of:

aggregating one or more component traffic flows into a component traffic stream;

aggregating one or more component traffic streams into an aggregate stream;

carrying the aggregate stream in a single, FIFO queue; and

generating selective backpressure on selected ones of the component traffic streams such that selected ones of the component streams are desirably regulated.

2. (Previously presented) The method according to claim 1, wherein said aggregation of the one or more traffic flows is performed according to a destination of the traffic flows and the similarity of Quality of Service requirements of the traffic flows.

3. (Previously presented) The method according to claim 1, wherein said aggregation of the one or more component traffic streams into said aggregate stream is performed according to a destination of the component traffic stream.

4. (Previously presented) The method according to claim 3, wherein said aggregation is performed according to an absence of delay guarantees.

5. (Canceled)

6. (Previously presented) The method according to claim 1, wherein said generating selective backpressure step comprises the steps of:

maintaining an aggregate queue occupancy counter;

maintaining a credit counter for each component traffic stream; and

asserting selective backpressure for a specific one of the component traffic streams when a corresponding credit counter reaches a predetermined threshold.

7. (Original) The method according to claim 6 further comprising the steps of:

initializing the credit counter to a maximum value;

decrementing the counter when an item of specific type arrives in the aggregate queue;

incrementing the counter when the queue is given service granted to the specific type of traffic stream without regard to the type of data item which departs the single FIFO queue;

truncating the counter at a specific maximum level; and

resetting the counter to a maximum value when the occupancy of the aggregate queue falls to zero.

8. (Previously presented) The method according to claim 6, wherein said backpressure asserting step is performed when the credit counter reaches a value of zero.

9. (Previously presented) The method according to claim 4, wherein two of said component traffic streams are a Guaranteed Bandwidth Traffic Stream and a Best Effort Traffic Stream, and wherein each data item arrival and departure event can be associated with either guaranteed or excess bandwidth service provided by a corresponding scheduler.

10. (Currently amended) The method according to claim 9, wherein the generating selective backpressure step further comprises the steps of:

maintaining an aggregate queue occupancy counter;

maintaining a Best Effort credit counter;

asserting a first ~~type of~~ backpressure signal; and

asserting a second ~~type of~~ backpressure signal.

11. (Currently amended) The method according to claim 10 wherein said first ~~type of~~ backpressure signal is applied towards both the Guaranteed Bandwidth Traffic Stream and the Best Effort Traffic Stream and wherein said second ~~type of~~ backpressure signal applies toward the Best Effort Traffic Stream.

12. (Previously presented) The method according to claim 10, wherein said step of maintaining said Best Effort credit counter further comprises the steps of:

initializing the counter to a maximum value;

incrementing the counter when an excess bandwidth service is provided to said aggregate queue;

decrementing the counter when a data item arrival is associated with excess bandwidth service; and

resetting the counter to its maximum value each time the occupancy of said aggregate queue reaches a value of zero.

13. (Currently amended) The method according to claim 12 wherein said incrementing step is not performed if the first ~~type of~~ backpressure signal is asserted.

14. (Original) The method according to claim 12, wherein said decrementing step is not performed if the arriving data item belongs to the Guaranteed Bandwidth Traffic Stream.

15. (Currently amended) The method according to claim 10, wherein said step of asserting a first ~~type of~~ backpressure signal occurs whenever the aggregate queue occupancy counter exceeds a predefined threshold.

16. (Currently amended) The method according to claim 10, wherein said step of asserting a second ~~type of~~ backpressure signal occurs whenever the Best Effort credit counter reaches a value of zero.